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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VLADIMIR MARIN
and ABBAS RAZAVI

Appeal 2009-002607
Application 10/751,243
Technology Center 1700

Decided:[1] July 30, 2009

Before CHARLES F. WARREN, ROMULO H. DELMENDO, and MICHAEL P. COLAIANNI, *Administrative Patent Judges.*

COLAIANNI, *Administrative Patent Judge.*

DECISION ON APPEAL

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[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellants appeal under 35 U.S.C. § 134 the final rejection of claims 1, 3, and 10-12. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We AFFIRM.

Appellants disclose olefin polymerization catalysts and their use in the polymerization of ethylenically unsaturated monomers (Spec. ¶ [0001]).

Claims 1 and 10 are illustrative:

1. A olefin polymerization catalyst characterized by the formula

$$B(FluA)MQ_n \qquad (3)$$

wherein:

a. Flu is a fluorenyl group substituted at at least one of the 4,5 positions by a bulky hydrocarbyl group containing a cyclic compound having from 3 to 30 carbon atoms;

b. A is a substituted or an unsubstituted cyclopentadienyl group, a substituted or unsubstituted indenyl group, or a heteroorgano group XR in which X is a heteroatom from Group 15 ot 16 of the Periodic Table, and R is an alkyl group, a cycloalkyl group or an aryl group containing from 1 to 20 carbon atoms;

c. B is a structural bridge between A and Flu imparting stereorigidity to the ligand structure (FluA);

d. M is a Group 4 or Group 5 transition metal;

e. Q is selected from the group consisting of Cl, Br, I, an alkyl group, an amino group, an aromatic group and mixtures thereof: and

f. n is 1 or 2.

10. The composition of claim 1 wherein A is a substituted or unsubstituted cyclopentadienyl group.

The Examiner relies on the following prior art references as evidence of unpatentability:[2]

Schertl	US 5,668,230	Sep. 16, 1997
Kaufmann	US 5,770,752	Jun. 23, 1998

The appealed rejections are as follows:[3]

1. Claims 1, 3, and 10-12 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Kaufmann.
2. Claims 1, 3, 10, and 11 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Schertl.

With regard to rejection (1), Appellants only argue claims 10 and 12. Claims 1, 3, and 11 stand or fall with our analysis of claims 10 and 12.

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[2] The Examiner cites to Shamshoum US patent 5,807,800 patented Sep. 15, 1998, as showing fluorenyl and indenyl groups are often exemplified as substituted cyclopentadienyl (Sec. Supp. Ex. Ans. 6). However, Shamshoum was not included in the statement of the rejection. Therefore, we will not consider this reference in determining the propriety of the Examiner's rejection. *See In re Hoch*, 428 F.2d 1341, 1342 n.3 (CCPA 1970) ("[W]here a reference is relied on to support a rejection, whether or not in a 'minor capacity,' there would appear to be no excuse for not positively including that reference in the statement of the rejection.").

[3] We have reconsidered our Remand mailed June 19, 2008 in light of the *Ex parte Ghuman*, 2008 WL 2109842 (BPAI May 1, 2008) precedential decision. We now determine that Appellants' Notice of Appeal filed November 30, 2006 and the Appeal Brief filed January 30, 2007 clearly indicated that claims 1, 3, and 10-12 (i.e., the pending claims) were being appealed (Principal App. Br. 2; Notice of Appeal 1). Accordingly, the holding in *Ghuman* does not apply to the present situation and, therefore, the Examiner lacks authority at this point in the prosecution to cancel claims 1, 3, and 11. Therefore, though Appellants have only argued claims 10 and 12 (Principal App. Br. 3-5) and the Examiner has indicated that claims 1, 3, and 11 have been canceled (Ex. Amendment 2), we considered claims 1, 3, and 10-12 on Appeal.

With regard to rejection (2), Appellants only argue claim 10. Claims 1, 3, and 11 stand or fall with our analysis of claim 10.

With regard to the Kaufmann and Schertl rejections, Appellants argue that the Examiner's finding that fluorenyl and indenyl groups are equivalent to substituted cyclopentadienyl groups is inconsistent with the Specification (Principal App. Br. 3). Appellants contend that the Specification recites that substituted fluorenyl groups are bridged to substituted or unsubstituted cyclopentadienyl or indenyl groups to produce ligand structures which are unbalanced with respect to the plane of symmetry through the bridge and transitional metal, such that the Examiner's definition that substituted cyclopentadienyl may include fluorenyl would not meet the disclosed asymmetry requirement (Principal App. Br. 4). Appellants contend that the Specification clearly teaches catalyst compounds containing a substituted cyclopentadienyl group lacking a fused substituent on the cyclopentadienyl (Cp) group (Principal App. Br. 4).

ISSUE

Have Appellants shown that the Examiner reversibly erred in determining that substituted cyclopentadienyl of claim 10 includes fluorenyl and indenyl groups? We decide this issue in the negative.

PRINCIPLES OF LAW

Claims are given the broadest reasonable construction consistent with the Specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the

specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

FACTUAL FINDINGS (FF)

1. The Specification discloses that an embodiment of the catalyst includes a substituted cyclopentadienyl where the substituents may be a C1-C4 alkyl group or an aryl group and a methyl group (Spec. ¶ [0011]).
2. The Specification further discloses a formula (6) wherein the cyclopentadienyl may be substituted with 3 substitutents having a C1-C4 alkyl group or an aryl group and an alkyl group of lower molecular weight than the first alkyl group (i.e., a total of 4 substituents) (Spec. ¶ [0013]).
3. The Specification indicates that the cyclopentadienyl may be "symmetrically substituted" (Spec. ¶ [0018]).
4. The Specification lists several non-limiting examples of fluorenyl ligands (Spec. ¶ [0020]).
5. The Specification does not disclose that the substituted cyclopentadienyl group excludes substituting the cyclopentadienyl to produce an indenyl or fluorenyl structure (Spec. generally).

ANALYSIS

The broadest reasonable interpretation of the claim phrase "substituted cyclopentadienyl" includes a cyclopentadienyl group substituted to form fluorenyl or indenyl structures. The plain meaning of "substituted cyclopentadienyl" in claim 10 does not exclude any particular substituent.

In other words, the claimed substituted cyclopentadienyl is broad enough to include a substituent that forms the fluorenyl or indenyl structure from the cyclopentadienyl.

Appellants argue that the Specification exemplifies suitable substitutents on the cyclopentadienyls, which include compounds lacking a fused substituent on the cyclopentadienyl group. However, Appellants' argument attempts to read limitations into the claims. Though the Specification exemplifies particular C1-C4 alkyl groups as substitutents (FF 1 & 2), we shall not read such limitations into Appellants' broad claim.

Appellants' argument that including a fluorenyl group as substituted cyclopentadienyl would not satisfy the disclosed requirement of having an unbalanced ligand structure, fails to appreciate or address that an indenyl structure would satisfy the substituted cyclopentadienyl structure and satisfy the disclosed unbalanced requirement.

With regard to claim 12, we agree with the Examiner that Kaufmann discloses a substituted cyclopentadienyl as properly construed, and the fluorenyl compound is substituted with a phenyl group as the 4 position (Sec. Supp. Ex. Ans. 5).

For the above reasons, Appellants have not shown that the Examiner erred in determining that the substituted cyclopentadienyl of claim 10 includes fluorenyl and indenyl groups. Accordingly, we affirm the Examiner's § 102(b) rejections of claims 10 and 12 over Kaufmann and over Schertl.

Furthermore, Appellants did not argue the ground of rejection of claims 1, 3 and 11 under 35 U.S.C. § 102(b) over Kaufmann and over Schertl present in the Final Office Action mailed August 30, 2006 (Final

Office Action 2). See App. Br. 2 and 3; *see also* above note 3. Accordingly, we summarily affirm these grounds of rejection.

DECISION

The Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

ORDER

AFFIRMED

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